

CHARGE NUMBER: 1101
PROGRAM TITLE: ENTOMOLOGICAL RESEARCH
PROJECT LEADER: M. A. Manzelli
PERIOD COVERED: March 1-31, 1977
DATE OF REPORT: March 31, 1977

I. INSECT GROWTH REGULATORS (IGRs)

- Tests have been initiated to determine the chemosterilant activity of PRECOCENE II against the cigarette beetle.¹
- An additional 48 hogsheads of burley strip have been treated at the Stemmary with 10 ppm ALTOSID®.²
- Burley stem treated at the Stemmary on February 16, 1977, with 10 ppm of ALTOSID® have been chemically assayed for residue. The samples, collected after the stem had left the dryer, averaged 6.5 ppm of ALTOSID®.³

II. CIGARETTE BEETLE PHYSIOLOGICAL STUDIES

A series of adult feeding tests employing a number of dyes in the food medium are yielding data indicating that digestion and absorption processes are present.⁴

III. ASSISTANCE TO AREAS OUTSIDE R & D

A second series of tests was conducted at the Primary to demonstrate that ES (expanded stem) packed 300-350 lbs. in polyethylene lined hogsheads and exposed to a Mohr unit for three minutes at 160°F would not retain any stages of the cigarette beetle in a viable condition. The temperatures in the bottom third of the ES filled hogsheads ranged from 153°-160°F.⁵

IV. REFERENCES

1. Long, J. S., Notebook No. 7008, p. 38.
2. Lehman, R. M., Notebook No. 7105, p. 17.
3. Walker, G., Notebook 6028, p. 80.
4. Minor, M. F., Notebook 6999, p. 65.
5. Minor, M. F., Notebook 6999, pp. 58, 59.

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